

## Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID: ssspta1635jxs

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

NEWS 1 Web Page URLs for STN Seminar Schedule - N. America  
NEWS 2 "Ask CAS" for self-help around the clock  
NEWS 3 SEP 01 INPADOC: New family current-awareness alert (SDI) available  
NEWS 4 SEP 01 New pricing for the Save Answers for SciFinder Wizard within  
STN Express with Discover!  
NEWS 5 SEP 01 New display format, HITSTR, available in WPIDS/WPINDEX/WPIX  
NEWS 6 SEP 27 STANDARDS will no longer be available on STN  
NEWS 7 SEP 27 SWETSCAN will no longer be available on STN  
NEWS 8 OCT 28 KOREAPAT now available on STN  
NEWS 9 NOV 18 Current-awareness alerts, saved answer sets, and current  
search transcripts to be affected by CERAB, COMPUAB, ELCOM,  
and SOLIDSTATE reloads

NEWS EXPRESS OCTOBER 29 CURRENT WINDOWS VERSION IS V7.01A, CURRENT MACINTOSH VERSION IS V6.0C(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 11 AUGUST 2004.

NEWS HOURS AND CURRENT DISCOVERY FILE IS DATED 11 AUGUST 2000  
STN Operating Hours Plus Help Desk Availability

NEWS HEADS SIR operating heads plus help  
NEWS INTER General Internet Information

GENERAL INTERNET INFORMATION  
NEWS LOGIN Welcome Banner and News Item

NEWS PHONE Direct Dial and Telecommunication Network Access to STN

## NEWS WWW CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

FILE 'HOME' ENTERED AT 13:55:14 ON 26 NOV 2004

=> FIL MEDLINE BIOSIS EMBASE CA SCISEARCH

**COST IN U.S. DOLLARS**

SINCE FILE

**TOTAL.**

JOURNAL OF POLYMER SCIENCE

THE  
ENTRY.

**TOTAL  
SESSION**

FILE 'BIOSIS' ENTERED AT 13:55:24 ON 26 NOV

FILE 'EMBASE' ENTERED AT 13:55:24 ON 26 NOV 2004

FILE 'CA' ENTERED AT 13:55:24 ON 26 NOV 2004  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'SCISEARCH' ENTERED AT 13:55:24 ON 26 NOV 2004  
Copyright (c) 2004 The Thomson Corporation.

```
=> s ((phosphatidylinositol or PI) (n) 3 (n) kinase? (n) (p110 or delta)) or (PI3
kinase? (n) (p110 or delta)) or (PI3K? (n) (p110 or delta))
L1      571 ((PHOSPHATIDYLINOSITOL OR PI) (N) 3 (N) KINASE? (N) (P110 OR
DELTA)) OR (PI3 KINASE? (N) (P110 OR DELTA)) OR (PI3K? (N) (P110
OR DELTA))

=> s antisense or (anti (n) sense) or (complemen? (2n) (oligonucl? or nucle?))
L2      145712 ANTISENSE OR (ANTI (N) SENSE) OR (COMPLEMEN? (2N) (OLIGONUCL?
OR NUCLE?))

=> s l1 and l2
L3      22 L1 AND L2

=> dup rem 13
PROCESSING COMPLETED FOR L3
L4      9 DUP REM L3 (13 DUPLICATES REMOVED)

=> s MONIA, B?/au; s COWSER, L?/au
L5      906 MONIA, B?/AU
```

S COWSER, IS NOT A RECOGNIZED COMMAND  
The previous command name entered was not recognized by the system.  
For a list of commands available to you in the current file, enter  
"HELP COMMANDS" at an arrow prompt (=>).

```
=> s MONIA, B?/au; s COWSER, L?/au
L6      906 MONIA, B?/AU
```

S COWSER, IS NOT A RECOGNIZED COMMAND  
The previous command name entered was not recognized by the system.  
For a list of commands available to you in the current file, enter  
"HELP COMMANDS" at an arrow prompt (=>).

```
=> s MONIA, B?/au; s COWSERT, L?/au
L7      906 MONIA, B?/AU
```

S COWSERT, IS NOT A RECOGNIZED COMMAND  
The previous command name entered was not recognized by the system.  
For a list of commands available to you in the current file, enter  
"HELP COMMANDS" at an arrow prompt (=>).

```
=> s cowsert, L?/au
L8      438 COWSERT, L?/AU
```

```
=> s 15 or 18
L9      1233 L5 OR L8
```

```
=> d his'
'HIS' IS NOT A VALID FORMAT
In a multifile environment, a format can only be used if it is valid
in at least one of the files. Refer to file specific help messages
```

or the STNGUIDE file for information on formats available in individual files.

REENTER DISPLAY FORMAT FOR ALL FILES (FILEDEFAULT) :end

=> end

ALL L# QUERIES AND ANSWER SETS ARE DELETED AT LOGOFF

LOGOFF? (Y)/N/HOLD:quit

'QUIT' IS NOT VALID HERE

For an explanation, enter "HELP LOGOFF".

=> d his

(FILE 'HOME' ENTERED AT 13:55:14 ON 26 NOV 2004)

FILE 'MEDLINE, BIOSIS, EMBASE, CA, SCISEARCH' ENTERED AT 13:55:24 ON 26 NOV 2004

L1 571 S ((PHOSPHATIDYLINOSITOL OR PI) (N) 3 (N) KINASE? (N) (P110 OR  
L2 145712 S ANTISENSE OR (ANTI (N) SENSE) OR (COMPLEMEN? (2N) (OLIGONUCL?  
L3 22 S L1 AND L2  
L4 9 DUP REM L3 (13 DUPLICATES REMOVED).  
L5 906 S MONIA, B?/AU  
L6 906 S MONIA, B?/AU  
L7 906 S MONIA, B?/AU  
L8 438 S COWSERT, L?/AU  
L9 1233 S L5 OR L8

=> s l9 and l1

L10 4 L9 AND L1

=> s l4 or l10

L11 11 L4 OR L10

=> dup rem l11

PROCESSING COMPLETED FOR L11

L12 9 DUP REM L11 (2 DUPLICATES REMOVED)

=> d l12 ibib abs

L12 ANSWER 1 OF 9 MEDLINE on STN

ACCESSION NUMBER: 2002408450 MEDLINE

DOCUMENT NUMBER: PubMed ID: 12162696

TITLE: GeneBlocs are powerful tools to study and delineate signal transduction processes that regulate cell growth and transformation.

AUTHOR: Sternberger Maria; Schmiedeknecht Anett; Kretschmer Anny; Gebhardt Frank; Leenders Frauke; Czauderna Frank; Von Carlowitz Ira; Engle Mike; Giese Klaus; Beigelman Leonid; Klippel Anke

CORPORATE SOURCE: atugen AG, Berlin, Germany.

SOURCE: Antisense & nucleic acid drug development, (2002 Jun) 12 (3) 131-43.

PUB. COUNTRY: Journal code: 9606142. ISSN: 1087-2906.

DOCUMENT TYPE: United States

LANGUAGE: Journal; Article; (JOURNAL ARTICLE)

FILE SEGMENT: English

ENTRY MONTH: Priority Journals

ENTRY DATE: 200301

Entered STN: 20020807

Last Updated on STN: 20030123

Entered Medline: 20030122

AB The study of signal transduction processes using **antisense** oligonucleotides is often complicated by low intracellular stability of the **antisense** reagents or by nonspecific effects that cause

toxicity. Here, we introduce a new class of **antisense** molecules, so-called GeneBlocs, which are characterized by improved stability, high target RNA specificity, and low toxicity. GeneBlocs allow for efficient downregulation of mRNA expression at nanomolar concentrations, and they do not interfere with cell proliferation. We demonstrate these beneficial properties using a positive readout system. GeneBloc-mediated inhibition of tumor suppressor PTEN (phosphatase and tension homologue detected on chromosome 10) expression leads to hyperactivation of the phosphatidylinositol (PI) 3-kinase pathway, thereby mimicking the loss of PTEN function and its early consequences observed in mammalian cancer cells. Specifically, cells treated with PTEN GeneBlocs show functional activation of Akt, a downstream effector of PI 3-kinase signaling, and exhibit enhanced proliferation when seeded on a basement membrane matrix. In addition, GeneBlocs targeting the catalytic subunit of **PI 3-kinase, p110**, specifically inhibit signal transduction of endogenous or recombinant PI 3-kinase. This demonstrates that GeneBlocs are powerful tools to analyze and to modulate signal transduction processes and, therefore, represent alternative reagents for the validation of gene function.

=> d 112 ibib abs 2-9

L12 ANSWER 2 OF 9 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN  
DUPLICATE 1

ACCESSION NUMBER: 2001:253065 BIOSIS

DOCUMENT NUMBER: PREV200100253065

TITLE: **Antisense modulation of PI3 kinase p110 beta expression.**

AUTHOR(S): **Monia, Brett P.** [Inventor]; **Cowser, Lex M.** [Inventor]

CORPORATE SOURCE: ASSIGNEE: Isis Pharmaceutical Inc.

PATENT INFORMATION: US 6133032 October 17, 2000

SOURCE: Official Gazette of the United States Patent and Trademark Office Patents, (Oct. 17, 2000) Vol. 1239, No. 3. e-file.  
CODEN: OGUPE7. ISSN: 0098-1133.

DOCUMENT TYPE: Patent

LANGUAGE: English

ENTRY DATE: Entered STN: 23 May 2001

Last Updated on STN: 19 Feb 2002

AB **Antisense** compounds, compositions and methods are provided for modulating the expression of **PI3 kinase p110 beta**. The compositions comprise **antisense** compounds, particularly **antisense** oligonucleotides, targeted to nucleic acids encoding **PI3 kinase p110 beta**.

Methods of using these compounds for modulation of **PI3 kinase p110 beta** expression and for treatment of diseases associated with expression of **PI3 kinase p110 beta** are provided.

L12 ANSWER 3 OF 9 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN  
DUPLICATE 2

ACCESSION NUMBER: 2000:447933 BIOSIS

DOCUMENT NUMBER: PREV200000447933

TITLE: **Antisense modulation of PI3 kinase p110 delta expression.**

AUTHOR(S): **Monia, Brett P.** [Inventor]; **Cowser, Lex M.** [Inventor]

CORPORATE SOURCE: ASSIGNEE: Isis Pharmaceuticals Inc.

PATENT INFORMATION: US 6046049 April 04, 2000

SOURCE: Official Gazette of the United States Patent and Trademark Office Patents, (Apr. 4, 2000) Vol. 1233, No. 1. e-file.  
CODEN: OGUPE7. ISSN: 0098-1133.

DOCUMENT TYPE: Patent  
LANGUAGE: English  
ENTRY DATE: Entered STN: 18 Oct 2000  
Last Updated on STN: 10 Jan 2002

AB **Antisense** compounds, compositions and methods are provided for modulating the expression of **PI3 kinase p110 delta**. The compositions comprise **antisense** compounds, particularly **antisense** oligonucleotides, targeted to nucleic acids encoding **PI3 kinase p110 delta**. Methods of using these compounds for modulation of **PI3 kinase p110 delta** expression and for treatment of diseases associated with expression of **PI3 kinase p110 delta** are provided.

L12 ANSWER 4 OF 9 MEDLINE on STN  
ACCESSION NUMBER: 2000482758 MEDLINE  
DOCUMENT NUMBER: PubMed ID: 10850853  
TITLE: IRAK-2 and PI 3-kinase synergistically activate NF-kappaB and AP-1.  
AUTHOR: Guo F; Wu S  
CORPORATE SOURCE: Institute of Pharmaceutic Sciences, The First Military Medical University, Guangzhou, China.  
SOURCE: Inflammation, (2000 Aug) 24 (4) 305-16.  
Journal code: 7600105. ISSN: 0360-3997.  
PUB. COUNTRY: United States  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 200010  
ENTRY DATE: Entered STN: 20001019  
Last Updated on STN: 20001019  
Entered Medline: 20001012

AB **Antisense** interleukin-1 (IL-1) receptor associated kinase-2 (IRAK-2) oligonucleotide (ODN) and **antisense p110 PI 3-kinase** ODN blocked IRAK-2 and **p110 PI 3-kinase** expression, respectively. As a result, **antisense** IRAK-2 ODN or **antisense p110 PI 3-kinase** ODN inhibited IL-1-induced NF-kappaB and AP-1 activation in HepG2 cells. The inhibition of NF-kappaB activation by **antisense** IRAK-2 ODN or **antisense p110 PI 3-kinase** ODN and the inhibition of AP-1 activation by **antisense** IRAK-2 ODN were incomplete, whereas AP-1 activation could be inhibited by **antisense p110 PI 3-kinase** ODN completely. These results indicate that IRAK-2 is necessary but insufficient to activate NF-kappaB and AP-1 completely and that although PI 3-kinase is not sufficient for NF-kappaB full activation, it is sufficient to activate AP-1 completely. The effects of IRAK-2 or PI 3-kinase on NF-kappaB and AP-1 activation were confirmed by the results that overexpression of IRAK-2 failed to fully activate NF-kappaB and AP-1 and that overexpression of **p110 PI 3-kinase** is insufficient for NF-kappaB full activation but sufficient for AP-1 activation. Cotransfection experiments showed that the combination of **antisense** IRAK-2 ODN and **antisense p110 PI 3-kinase** ODN resulted in additive inhibition of NF-kappaB as well as AP-1 activation. On the other hand, coexpression of IRAK-2 with **p110 PI 3-kinase** led to a synergistic activation of NF-kappaB and AP-1. These data suggest that IRAK-2 and PI 3-kinase cooperate to activate NF-kappaB and AP-1.

L12 ANSWER 5 OF 9 CA COPYRIGHT 2004 ACS on STN  
ACCESSION NUMBER: 130:151352 CA

TITLE: Distinct roles for the p110 $\alpha$  and hVPS34 phosphatidylinositol 3'-kinases in vesicular trafficking, regulation of the actin cytoskeleton, and mitogenesis

AUTHOR(S): Siddhanta, Uma; McIlroy, James; Shah, Amishi; Zhang, Yitao; Backer, Jonathan M.

CORPORATE SOURCE: Department of Molecular Pharmacology, Albert Einstein College of Medicine, Bronx, NY, 10461, USA

SOURCE: Journal of Cell Biology (1998), 143(6), 1647-1659

CODEN: JCLBA3; ISSN: 0021-9525

PUBLISHER: Rockefeller University Press

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The authors have examined the roles of the p85/p110 $\alpha$  and hVPS34 phosphatidylinositol (PI) 3'-kinases in cellular signaling using inhibitory isoform-specific antibodies. They raised anti-hVPS34 and anti-p110 $\alpha$  antibodies that specifically inhibit recombinant hVPS34 and p110 $\alpha$ , resp., in vitro. They used the antibodies to study cellular processes that are sensitive to low-dose wortmannin. The antibodies had distinct effects on the actin cytoskeleton; microinjection of anti-p110 $\alpha$  antibodies blocked insulin-stimulated ruffling, whereas anti-hVPS34 antibodies had no effect. The antibodies also had different effects on vesicular trafficking. Microinjection of inhibitory anti-hVPS34 antibodies, but not anti-p110 $\alpha$  antibodies, blocked the transit of internalized PDGF receptors to a perinuclear compartment, and disrupted the localization of the early endosomal protein EEA1. Microinjection of anti-p110 $\alpha$  antibodies, and to a lesser extent anti-hVPS34 antibodies, reduced the rate of transferrin recycling in CHO cells. Surprisingly, both antibodies inhibited insulin-stimulated DNA synthesis by 80%. Injection of cells with antisense oligonucleotides derived from the hVPS34 sequence also blocked insulin-stimulated DNA synthesis, whereas scrambled oligonucleotides had no effect. Interestingly, the requirement for p110 $\alpha$  and hVPS34 occurred at different times during the G1-S transition. These data suggest that different PI 3'-kinases play distinct regulatory roles in the cell, and document an unexpected role for hVPS34 during insulin-stimulated mitogenesis.

REFERENCE COUNT: 64 THERE ARE 64 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 6 OF 9 CA COPYRIGHT 2004 ACS on STN  
ACCESSION NUMBER: 128:58975 CA  
TITLE: Human phosphatidylinositol 3-kinase and its cloning, characterization, and enhanced expression in melanomas  
INVENTOR(S): Vanhasebroeck, Bart; Waterfield, Michael Derek  
PATENT ASSIGNEE(S): Ludwig Institute for Cancer Research, Switz.; Vanhasebroeck, Bart; Waterfield, Michael Derek  
SOURCE: PCT Int. Appl., 72 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9746688	A1	19971211	WO 1997-GB1471	19970530
W: AU, CA, CN, JP, KR, NZ, US				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
CA 2256483	AA	19971211	CA 1997-2256483	19970530
AU 9729705	A1	19980105	AU 1997-29705	19970530
AU 719354	B2	20000504		
EP 914448	A1	19990512	EP 1997-924137	19970530

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
IE, FI

CN 1220701	A	19990623	CN 1997-195151	19970530
NZ 332634	A	20000929	NZ 1997-332634	19970530
JP 2000517165	T2	20001226	JP 1998-500305	19970530
US 6482623	B1	20021119	US 1998-194640	19981201
US 2003099627	A1	20030529	US 2002-162160	20020603
GB 1996-11460 A 19960601				
WO 1997-GB1471 W 19970530				
US 1998-194640 A3 19981201				

PRIORITY APPLN. INFO.:

AB The invention relates to a novel lipid kinase termed p110 $\delta$  which is part of the phosphatidylinositol 3-kinase (PI3) Kinase family. Human PI3 Kinase p110 $\delta$  interacts with p85, has a broad phosphoinositide specificity, and is sensitive to the same kinase inhibitors as PI3 Kinase p110 $\alpha$ .

However in contrast to previously identified PI3 Kinases which show a ubiquitous pattern of expression, p110 $\delta$  is selectively expressed in leukocytes. Importantly, p110 $\delta$  shows enhanced expression in most melanomas tested and therefore may play a crucial role in regulating the metastatic property exhibited by melanomas. Further, p110 $\delta$  undergoes autophosphorylation in a Mn<sup>2+</sup>-dependent manner, which hinders the lipid kinase activity of the protein. The identification of agents that enhance or reduce p110 $\delta$  activity may therefore prevent cancer metastasis.

L12 ANSWER 7 OF 9 CA COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 125:140241 CA

TITLE: Association of phosphatidylinositol 3 kinase to protein kinase C  $\zeta$  during interleukin-2 stimulation

AUTHOR(S): Gomez, Javier; Martinez-A., Carlos; Garcia, Alphonse; Rebollo, Angelita

CORPORATE SOURCE: Centro Nacional Biotecnologia, Universidad Autonoma, Madrid, E-28049, Spain

SOURCE: European Journal of Immunology (1996), 26(8), 1781-1787

CODEN: EJIMAF; ISSN: 0014-2980

PUBLISHER: VCH

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Interleukin-2 induces a serine-phosphorylated phosphatidylinositol 3 kinase activity in the mouse T cell line TS1 $\alpha\beta$ . Moreover, protein kinase C (PKC)  $\zeta$  directly or indirectly assocs. with the phosphatidylinositol 3 kinase and the association appears to be necessary for the serine-phosphorylated phosphatidylinositol 3 kinase activity, since release of  $\zeta$ PKC by competition of binding with peptides spanning the p110 sequence from amino acids 907 to 925 abolishes the serine-phosphorylated phosphatidylinositol 3 kinase activity. This kinase activity is also blocked when  $\zeta$ PKC expression is inhibited by antisense oligonucleotide. Inhibition of phosphatidylinositol 3 kinase activity by wortmannin does not abolish  $\zeta$ PKC association

L12 ANSWER 8 OF 9 MEDLINE on STN

ACCESSION NUMBER: 96009592 MEDLINE

DOCUMENT NUMBER: PubMed ID: 7565716

TITLE: A phosphatidylinositol (PI) kinase gene family in Dictyostelium discoideum: biological roles of putative mammalian p110 and yeast Vps34p PI 3-kinase homologs during growth and development.

AUTHOR: Zhou K; Takegawa K; Emr S D; Firtel R A

CORPORATE SOURCE: Department of Biology, Howard Hughes Medical Institute, University of California, San Diego, La Jolla 92093-0634, USA.

CONTRACT NUMBER: CA60559 (NCI)  
SOURCE: Molecular and cellular biology, (1995 Oct) 15 (10) 5645-56.  
Journal code: 8109087. ISSN: 0270-7306.  
PUB. COUNTRY: United States  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
OTHER SOURCE: GENBANK-U23476; GENBANK-U23477; GENBANK-U23478;  
GENBANK-U23479; GENBANK-U23480  
ENTRY MONTH: 199510  
ENTRY DATE: Entered STN: 19951227  
Last Updated on STN: 20021218  
Entered Medline: 19951025

AB Three groups of phosphatidylinositol (PI) kinases convert PI into PI(3)phosphate, PI(4)phosphate, PI(4,5) bisphosphate, and PI(3,4,5)trisphosphate. These phosphoinositides have been shown to function in vesicle-mediated protein sorting, and they serve as second-messenger signaling molecules for regulating cell growth. To further elucidate the mechanism of regulation and function of phosphoinositides, we cloned genes encoding five putative PI kinases from *Dictyostelium discoideum*. Database analysis indicates that *D. discoideum* PIK1 (DdPIK1), -2, and -3 are most closely related to the mammalian p110 PI 3-kinase, DdPIK5 is closest to the yeast Vps34p PI 3-kinase, and DdPIK4 is most homologous to PI 4-kinases. Together with other known PI kinases, a superfamily of PI kinase genes has been defined, with all of the encoded proteins sharing a common highly conserved catalytic core domain. DdPIK1, -2, and -3 may have redundant functions because disruption of any single gene had no effect on *D. discoideum* growth or development. However, strains in which both of the two most highly related genes, DdPIK1 and DdPIK2, were disrupted showed both growth and developmental defects, while double knockouts of DdPIK1 and DdPIK3 and DdPIK2 and DdPIK3 appear to be lethal. The delta Ddpik1 delta Ddpik2 null cells were smaller than wild-type cells and grew slowly both in association with bacteria and in axenic medium when attached to petri plates but were unable to grow in suspension in axenic medium. When delta Ddpik1 delta Ddpik2 null cells were plated for multicellular development, they formed aggregates having multiple tips and produced abnormal fruiting bodies. **Antisense** expression of DdPIK5 (a putative homolog of the *Saccharomyces cerevisiae* VPS34) led to a defect in the growth of *D. discoideum* cells on bacterial lawns and abnormal development. DdPIK5 complemented the temperature-sensitive growth defect of a *Schizosaccharomyces pombe* delta Svp34 mutant strain, suggesting DdPIK5 encodes a functional homolog of yeast Vps34p. These observations indicate that in *D. discoideum*, different PI kinases regulate distinct cellular processes, including cell growth, development, and protein trafficking.

L12 ANSWER 9 OF 9 CA COPYRIGHT 2004 ACS on STN  
ACCESSION NUMBER: 120:100544 CA  
TITLE: Cloning and expression of a cDNA for a subunit of PI3 kinase  
INVENTOR(S): Hiles, Ian D.; Fry, Michael J.; Dhand, Ritu;  
Waterfield, Michael D.; Parker, Peter J.; Otsu,  
Masayuki; Panayotou, George; Volinia, Stefano; Gout,  
Ivan  
PATENT ASSIGNEE(S): Ludwig Institute for Cancer Research, Barbados  
SOURCE: PCT Int. Appl., 146 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9321328	A1	19931028	WO 1993-GB761	19930413
W: AU, CA, JP, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9339017	A1	19931118	AU 1993-39017	19930413
AU 664893	B2	19951207		
EP 590126	A1	19940406	EP 1993-908028	19930413
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
JP 06510207	T2	19941117	JP 1993-518112	19930413
JP 07203963	A2	19950808	JP 1994-4313	19940120
JP 3471879	B2	20031202		
US 5824492	A	19981020	US 1994-162081	19940207
US 5846824	A	19981208	US 1997-780872	19970109
US 6274327	B1	20010814	US 1998-85957	19980527
PRIORITY APPLN. INFO.:			GB 1992-8135	A 19920413
			WO 1993-GB761	A 19930413
			US 1994-162081	A3 19940207
			US 1997-780872	A3 19970109

AB PI3 kinase activity is manufactured by expression of the cloned genes in insect cell culture. Affinity purification of the protein from bovine brain using Y751 phosphopeptide from PDGF- $\beta$  receptor as the affinity ligand identified the p85 and p110 (actual mol. weight 124 kDa) proteins that bound to the column with very high affinity and appeared to form a complex. A cDNA bank from SGBAF-1 cells in  $\lambda$ Uni-ZAP was screened with amino acid sequence-derived oligonucleotide probes from the p110 protein. and the cDNA expressed in Sf9 cells using a baculovirus vector. A cDNA clone was expressed in Sf9 cells using a baculovirus vector to give a detectable PI3 kinase activity. Tissue specificity of gene expression is determined and the corresponding human cDNA was cloned.

## Search Results - Record(s) 1 through 10 of 10 returned.

- 1. US 6046049A. New antisense compounds targeting nucleic acids encoding human PI3 kinase p110 delta useful for treating a disease or condition associated with PI3 kinase p110 delta expression, e.g. rheumatoid arthritis, asthma. COWSERT, L M, et al. A61K031/7125 A61K048/00 A61P011/06 A61P019/02 A61P029/00 A61P043/00 C07H021/04 C12N015/00 C12N015/09 C12N015/11 C12Q001/68.
- 2. 6046049. 19 Jul 99; 04 Apr 00. Antisense modulation of PI3 kinase p110 delta expression. Monia, Brett P., et al. 435/375; 435/366 435/6 435/91.1 536/23.1 536/24.31 536/24.33 536/24.5. C07H021/04 C12Q001/68 C12N015/00.
- 3. 5846824. 09 Jan 97; 08 Dec 98. Polypeptides having kinase activity, their preparation and use. Hiles, Ian D., et al. 435/348; 435/320.1 435/325 536/23.2 536/24.3. C12N005/10 C12N005/16 C12N015/54 C12N015/63.
- 4. 6274327. 27 May 98; 14 Aug 01. Polypeptides having kinase activity, their preparation and use. Hiles, Ian D., et al. 435/7.1; 435/15 435/194 435/21 435/252.3 435/348 435/6 435/69.1 435/69.2 435/7.2 435/7.8 530/350 530/388.26. G01N033/53 C12Q001/68 C12Q001/48 C12Q001/42.
- 5. 5824492. 07 Feb 94; 20 Oct 98. Polypeptides having kinase activity, their preparation and use. Hiles, Ian D., et al. 435/15; 435/194 435/29. C12N009/12 C12Q001/48.
- 6. 20010016332. 07 Aug 97. 23 Aug 01. AGE-1 POLYPEPTIDES AND RELATED MOLECULES AND METHODS. RUVKUN, GARY, et al. 435/69.1; 424/9.1 435/320.1 435/325 435/375 800/21 800/3 800/8 C12N015/63 A61K049/00 C12N005/00.
- 7. 5650293. 10 Jun 94; 22 Jul 97. Nucleic acid encoding pp60.sup.PIK and the methods of making pp60.sup.PIK. White, Morris F.. 435/69.1; 435/252.3 435/320.1 435/354 536/23.5. C12P021/06 C12N005/00 C12N001/20 C07H021/04.
- 8. 5985589. 06 Jan 99; 16 Nov 99. Lipid kinase. Chantry, David H., et al. 435/15; 435/194 435/252.3 435/320.1 435/69.1 435/69.2 435/7.7 530/350 536/23.2 536/23.5. C12Q001/48 C12N009/12 C12P021/06 C07H021/04.
- 9. 5882910. 25 Nov 97; 16 Mar 99. Lipid kinase. Chantry, David H., et al. 435/194; 435/252.3 435/320.1 435/69.1 435/69.2 435/7.7 530/350 536/23.2 536/23.5. C12N009/12 C12N001/20 C12P021/06 C07H021/04.
- 10. 6482623. 01 Dec 98; 19 Nov 02. Lipid kinase. Vanhaesebroeck, Bart, et al. 435/194; 435/183 435/252.3 435/320.1 435/6 536/23.2. C12N009/12 C12N021/06 C12N009/00 C12N001/20 C12N015/00.

Terms	Documents
L5 and (@ad<19990720)	10

[Prev Page](#) [Next Page](#) [Go to Doc#](#)

## Search Results - Record(s) 1 through 8 of 8 returned.

1. US 6046049A. New antisense compounds targeting nucleic acids encoding human PI3 kinase p110 delta useful for treating a disease or condition associated with PI3 kinase p110 delta expression, e.g. rheumatoid arthritis, asthma. COWSERT, L M, et al. A61K031/7125 A61K048/00 A61P011/06 A61P019/02 A61P029/00 A61P043/00 C07H021/04 C12N015/00 C12N015/09 C12N015/11 C12Q001/68.

2. 6046049. 19 Jul 99; 04 Apr 00. Antisense modulation of PI3 kinase p110 delta expression. Monia; Brett P., et al. 435/375; 435/366 435/6 435/91.1 536/23.1 536/24.31 536/24.33 536/24.5. C07H021/04 C12Q001/68 C12N015/00.

3. 6133032. 09 Sep 99; 17 Oct 00. Antisense modulation of PI3 kinase p110 beta expression. Monia; Brett P., et al. 435/375; 435/325 435/366 435/6 435/91.1 536/23.1 536/24.31 536/24.33 536/24.5. C07H021/04 C12N015/00 C12Q001/68.

4. 20030135033. 06 Jan 03. 17 Jul 03. Compounds and methods for the identification and/ or validation of a target. Klippel-Giese, Anke, et al. 536/23.1; 435/6 C12Q001/68 C07H021/04.

5. 20030099627. 03 Jun 02. 29 May 03. Method for determining modulation of p110delta activity. Vanhaesebroeck, Bart, et al. 424/94.5; 435/194 435/320.1 435/325 435/69.1 536/23.2 A61K038/51 C07H021/04 C12N009/12 C12P021/02 C12N005/06.

6. 20040038207. 14 Sep 01. 26 Feb 04. Gene expression in bladder tumors. Orntoft, Torben F.. 435/6; C12Q001/68.

7. 20010024783. 13 Dec 00. 27 Sep 01. Non-invasive method for detecting target RNA. Iversen, Patrick L.. 435/6; 435/7.1 435/7.8 536/23.1 536/24.31 536/24.32 536/24.5 C12Q001/68 G01N033/53 C07H021/04.

8. 20030171328. 22 Apr 03. 11 Sep 03. Non-invasive method for detecting target-RNA. Iversen, Patrick L.. 514/44; 435/6 435/7.1 C12Q001/68 G01N033/53 A61K048/00.

 

Terms	Documents
L2 same L1	8

[Prev Page](#) [Next Page](#) [Go to Doc#](#)